



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/697,381

10/30/2003

Sean D. Hannigan

LAMA121948

7449

26389

7590

03/13/2008

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

EXAMINER

DANNEMAN, PAUL

ART UNIT

PAPER NUMBER

3627

MAIL DATE

DELIVERY MODE

03/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,381	Applicant(s) HANNIGAN ET AL.	
	Examiner PAUL DANNEMAN	Art Unit 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>30 October 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in response to the application filed on 30 October 2003.
2. Claims 1-9 have been examined.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 7 July 2003. It is noted, however, that applicant has not filed a certified copy of the 2,434,707 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al., US 5,928,291 hereafter known as Jenkins.
7. **Examiner's note:** Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the **entire** reference as potentially teaching all or part of the claimed invention, as well as the content of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1 and 6:

With regard to the limitations:

- ***Computing device containing highway geographic data.***
- ***Vehicle having positional data (latitude and longitude).***
- ***Providing fuel consumption and positioning data to computing device with highway geographic data to determine off-highway fuel consumption.***

Jenkins in at least Column 1, lines 54-67 and Column 2, lines 4-16 discloses a commercial vehicle fleet management system with an onboard computer, a precise positioning system, and communication system to provide automated calculating and reporting of jurisdictional fuel taxes, road use taxes, vehicle registration fee, fuel consumption, border crossings, and the like. Jenkins in at least Column 3, lines 29-40 further discloses the precise positioning system on-board the vehicle as a satellite based system such as GPS. Other positioning systems such as LORAN, OMEGA are also disclosed to determine vehicle position on a periodic interval where a vehicle path can be calculated and stored in memory. Therefore, it would be obvious, at the time of the

invention, to one of ordinary skill to determine that Jenkins provides all the required information as claimed in applicant's invention.

Claims 2-3, 5, 7 and 9:

With regard to the limitations:

- ***Stationary base computing device with stored geographic data.***
- ***Mobile computing device containing fuel consumption data and positioning data.***

Jenkins in at least Column 4, lines 609-67 and lines 6-17 discloses employing a database containing geographical location information and defining the area as a geo-cell, based on jurisdictional boundaries, country borders, state borders, or even county or city lines, etc. and downloading to an on-board vehicle memory device only the needed geo-cell information for a given route. Jenkins in at least Fig.2, Fig.3, and Column 4, lines 18-36 discloses two-way communication using satellite and other wireless methods, with a central office or dispatcher. Jenkins in at least Figs 9A and 9B shows a vehicle having an on-board computer whereby RPM, vehicle speed, and fuel consumption may be monitored and correlated with position tracking data. Jenkins in at least Figs.11B and 11C, Column 5, lines 62-67 and Column 6, lines 1-31 discloses an in-transit vehicle communicating with a dispatch office to report monitored events such as route changes, state line and border crossings, change of geo-cell and the like. Therefore, it would be obvious, at the time of the invention, to one of ordinary skill to conclude that Jenkins' use of geo-cells is similar in function to applicant's invention.

Claims 4 and 8:

With regard to the limitations:

- ***Having a first fuel flow sensor from fuel tank to motor.***
- ***Having a second fuel flow sensor from motor to fuel tank.***

Art Unit: 3627

Jenkins does not specifically indicate the number of fuel flow sensors per se. However, Jenkins in at least Figs. 9A, 9B and 13, Column 2, line 10, Column 5, lines 21-26, and Column 7, lines 23-37 discloses monitoring and measuring the fuel consumption and recording and periodically reporting the fuel consumption information to a central dispatch central dispatch office. Therefore, it would be obvious, at the time of the invention, to one of ordinary skill to conclude that the measurement of fuel consumption may be measured by one or many sensors and by use of other methods depending on the accuracy and other business considerations.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Haendel et al., US 5,612,875 teaches a system for accurately determining the mileage a vehicle has traveled within a geographical boundary.
- Westerlage et al., US 5,694,322 teaches a method and apparatus for determining tax of a vehicle.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

25 February 2008

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627